

## BC STUDENT OUTCOMES

# information paper

## Start Me Up: Outcomes of Trades Foundation Students

*Who took trades foundation programs? Did these former students go on to apprenticeships? What were their employment outcomes?*

### Introduction

Trades foundation programs, which usually offer training in both a classroom and in-shop setting, are designed to give students the key skills and knowledge needed for entry into a particular trade.<sup>1</sup> Most foundation programs link to apprenticeship and can provide credit for the first level of technical training and for some of the work-based training hours that are required to complete a traditional apprenticeship.

A traditional apprenticeship typically requires the completion of four or five levels of training, approximately 20 percent of which is technical training, done in a classroom setting. Apprentices receive credit for each level and are eligible for a certificate of qualification (the ticket to practice their trade) only after they complete all levels of training, workplace requirements, and exams.

In recent years, there have been some changes that have had an impact on foundation training. The Industry Training Authority (ITA) has changed certain programs from traditional “level” programs to “progressive” programs. In progressive programs, trades apprentices can obtain a certificate of qualification after completing each “progression,” which previously would only have been one level of the training needed to complete an apprenticeship. A number of foundation programs link to progressive credential trades training programs, and some programs that were foundation (first level cook or welding, for example) have become progressive programs.

*Foundation programs give students the key skills and knowledge needed for entry into a trade.*

*A traditional apprenticeship requires four or five levels of training.*

*Progressive apprenticeship programs make it possible for an apprentice to obtain a certificate of qualification after each “progression.”*

*Foundation programs can link to traditional or progressive apprenticeships.*

Foundation trades training for both traditional levelled and progressive apprenticeships includes a number of programs that are available to high school students, under the Accelerated Credit Enrolment to Industry Training (ACE IT) program. The students can take the first level of technical training, which gives them dual credits that apply toward high school graduation and apprenticeship technical training.

*Some foundation programs are available to high school students.*

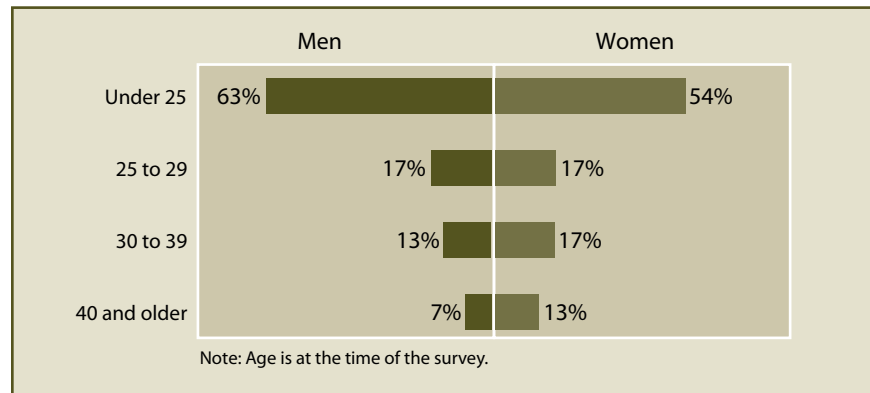
Information from former students who have taken trades foundation programs has been collected by the Diploma, Associate Degree, and Certificate Student Outcomes (DACSO) Survey. Most of the former students from progressive programs are now being surveyed through the Apprenticeship Student Outcomes (APPSO) Survey.<sup>2</sup>

*Former students who have taken trades foundation programs are surveyed by the Diploma, Associate Degree, and Certificate Student Outcomes (DACSO) Survey.*

## Former trades foundation students

According to the respondents of the 2014 DACSO Survey, the typical foundation program student was a young man, born in Canada, who trained as a mechanic and planned to go on to do an apprenticeship.

The median age of former trades foundation students was 23 at the time of the 2014 survey, and 84 percent were men. The women who took foundation programs were more likely than the men to be over 25.



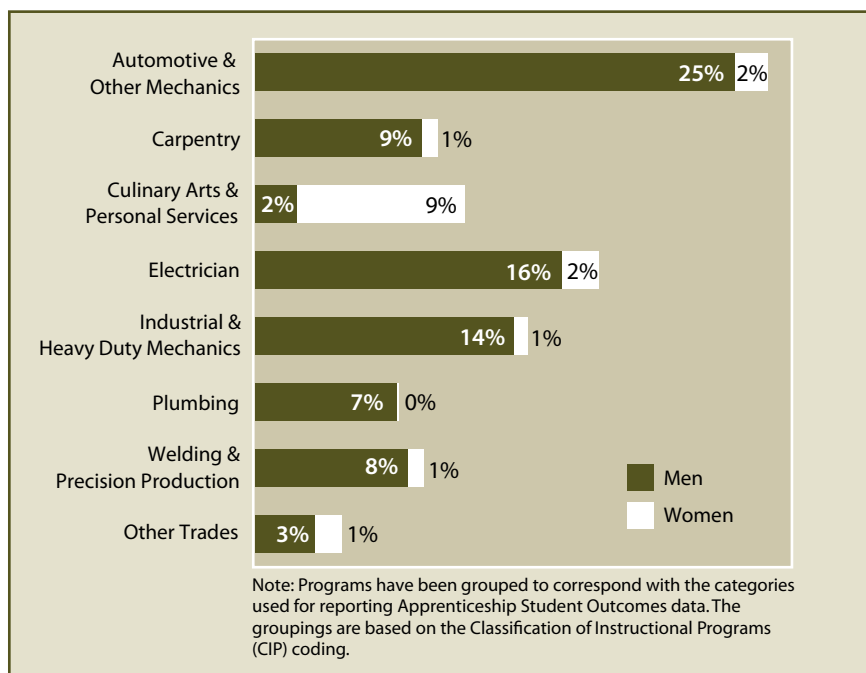
*A majority of respondents were under 25.*

A majority (81 percent) of the trades foundation respondents were born in Canada. Of those who immigrated to Canada, almost half (48 percent) were naturalized citizens when they took their studies and another third (33 percent) were permanent residents.

Of the respondents who were Canadian-born, 9 percent reported they had an Aboriginal identity. Almost two-thirds (63 percent) of those with an Aboriginal identity were First Nations; the others (37 percent) were Métis.

The program group<sup>3</sup> of Automotive & Other Mechanics had the largest number of respondents, followed by Electrician programs and Industrial & Heavy Duty Mechanics. The participation of women was low in most programs. The exception was Culinary Arts & Personal Services, where 80 percent of the program

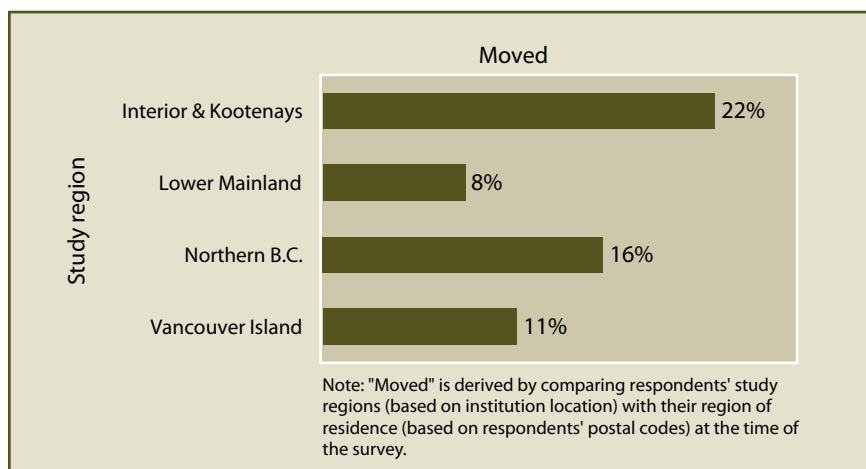
participants were women; however, that amounted to only 9 percent of the trades foundation respondents overall.



*The program group of Automotive & Other Mechanics was the largest.*

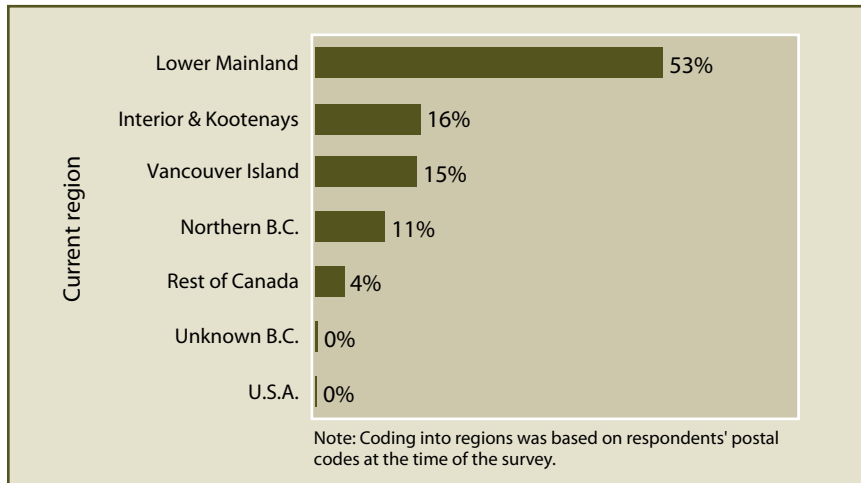
Most (91 percent) respondents took trades foundations programs that offered certificates. The other possible credential was a diploma, which was awarded for programs in aircraft maintenance engineering, telecommunications, advanced culinary arts, and in some automotive service technician programs.

Almost one-quarter (22 percent) of the former students relocated from their home communities to take their trades foundation programs. Well over half (55 percent) took their training in the Lower Mainland, and by and large, they stayed in the Lower Mainland after they finished studying. The respondents who trained in the Interior & Kootenays were the most likely to move from their study region afterward. Overall, 12 percent of former trades foundation students moved after their training.



*Respondents who trained in the Interior & Kootenays region were the most likely to move.*

At the time of the survey, over half of the respondents were living in the Lower Mainland.



*At the time of the survey, over half of the former trades foundation students lived in the Lower Mainland.*

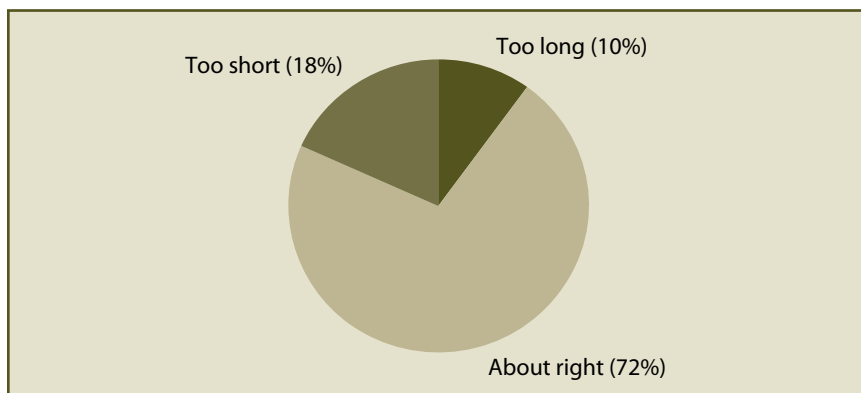
## Assessment of trades foundation training

### Assessments from the 2014 survey

In 2014, respondents were asked a number of questions specifically about their foundation training and their subsequent experiences:

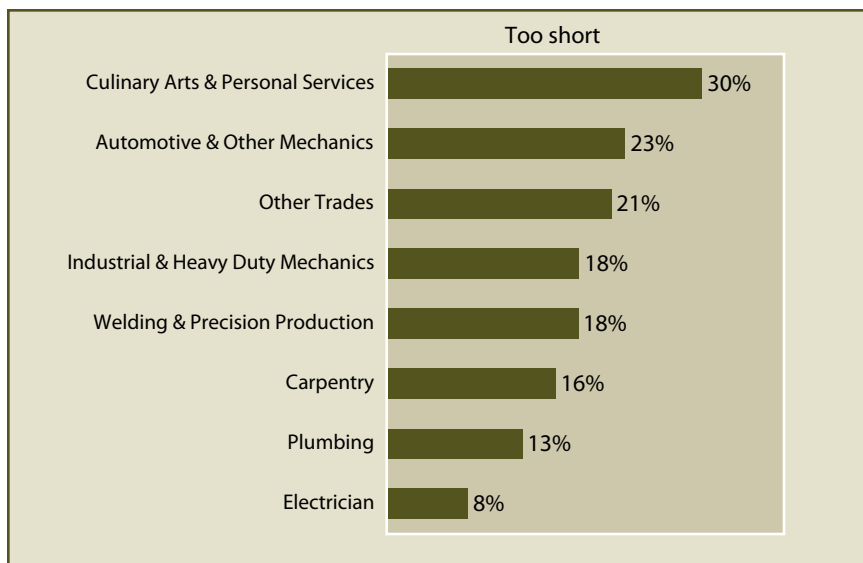
- Was the length of your in-school training adequate to cover the material?
- Did you try to get employment as an apprentice after you left your program?
- Were you successful in getting employment as an apprentice?
- How well did your program prepare you for your apprenticeship training?

While a majority of the former trades foundation students surveyed in 2014 said the length of their in-school training was adequate to cover the material, a significant portion said the training was too short.



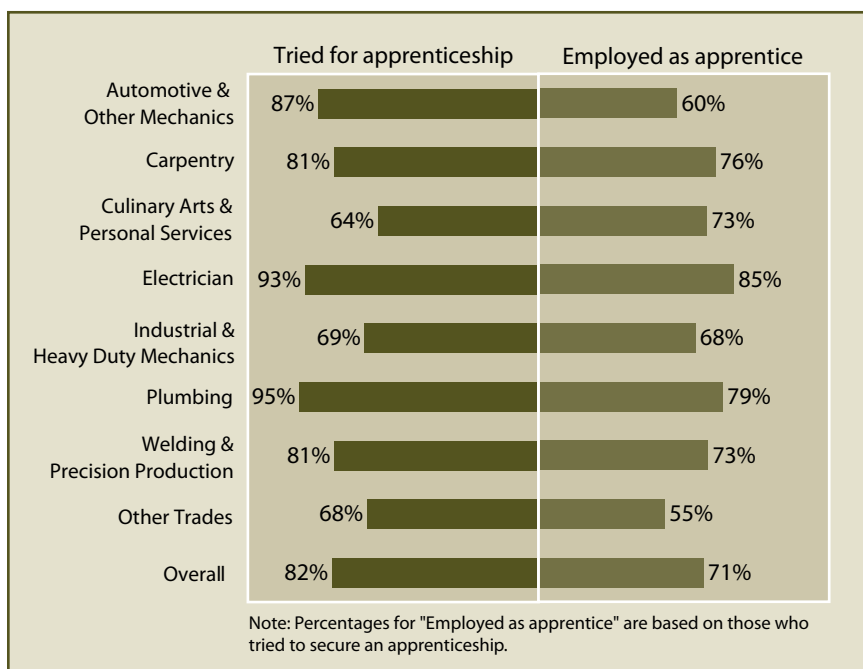
*Almost three-quarters said the length of their training was about right.*

There were differences by program: former Electrician students were the least likely to say their program was too short, while those who had trained in Culinary Arts & Personal Services were the most likely.



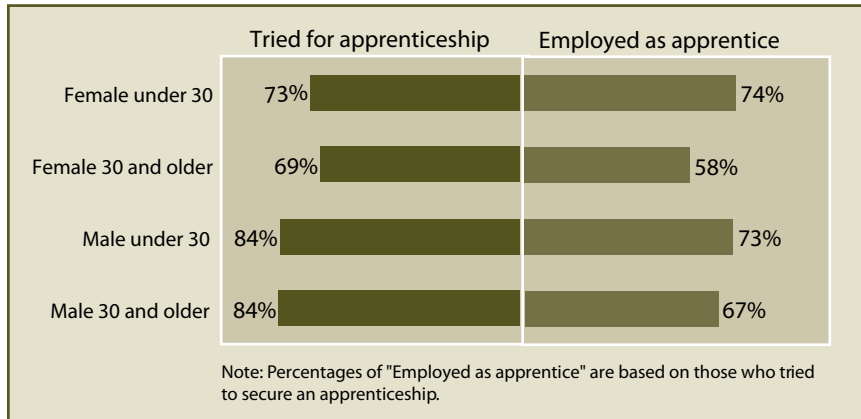
*Respondents from Culinary Arts & Personal Services were the most likely to say their training was too short.*

The majority of the trades foundation respondents said they tried to secure employment as an apprentice after their foundation training; 7 out of 10 of those who tried, were successful. Of all the former students who took foundation trades training, well over half (58 percent) found employment as apprentices. This finding is consistent with what was reported in the recent *ITA 2014/15–2016/17 Annual Service Plan Report*.<sup>4</sup> The Board Chair’s Message and Accountability Statement included, “In 2014/15, ITA exceeded a key performance target, with 57% of participants in Foundation programs continuing on to Apprenticeship programs.” For the previous year (2013/2014) the actual measure reported was 54 percent.



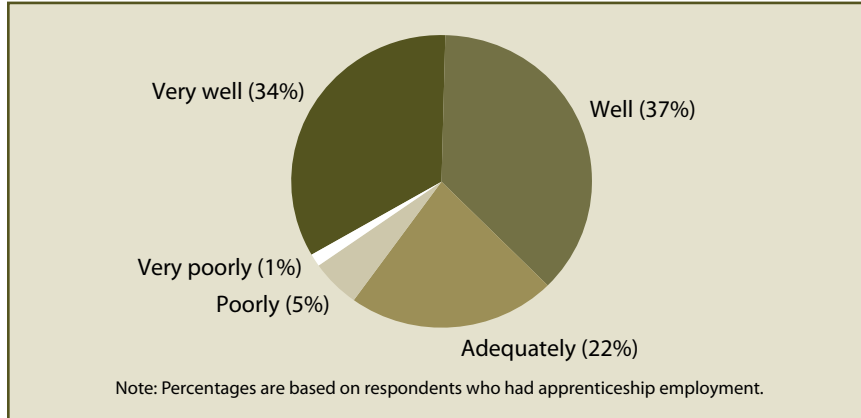
*A majority of the former trades foundation students who tried to secure an apprenticeship were successful.*

Men were more likely than women to try for an apprenticeship and more likely to find employment as an apprentice. Age was also a factor; in particular, respondents 40 or older were somewhat less likely than younger respondents to try to find an apprenticeship after their studies (75 versus 82 percent). Respondents who were under 30 at the time of the survey were significantly more likely to find employment as an apprentice.



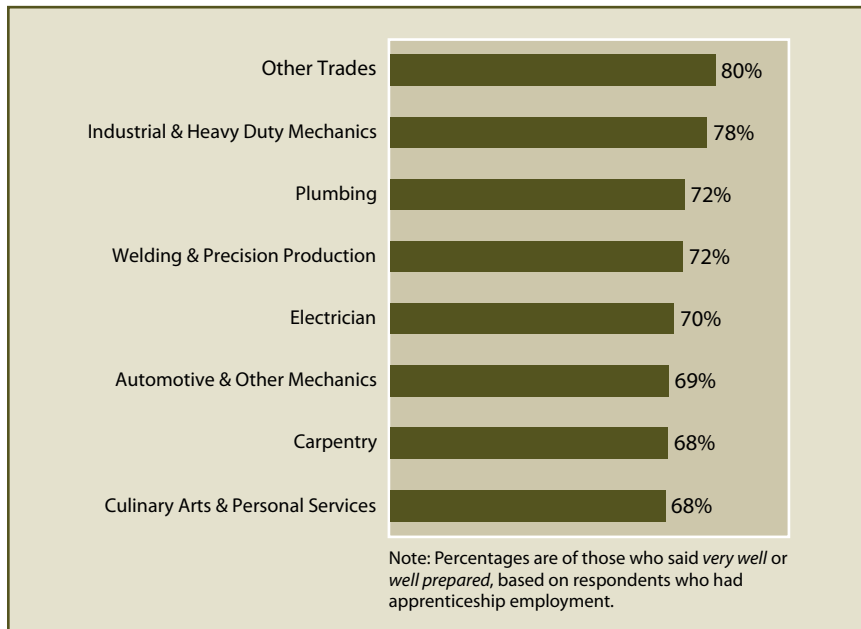
*Younger respondents had an advantage securing apprenticeships.*

The former trades foundation students who were successful in securing employment as apprentices were asked how well their program prepared them for their apprenticeship training—71 percent said they were *very well* or *well prepared*.



*Former students were likely to say their training prepared them for apprenticeship.*

The percentage of those who said they were *very well* or *well prepared* for their apprenticeships varied by program, with a considerable range between Other Trades and Culinary Arts & Personal Services.

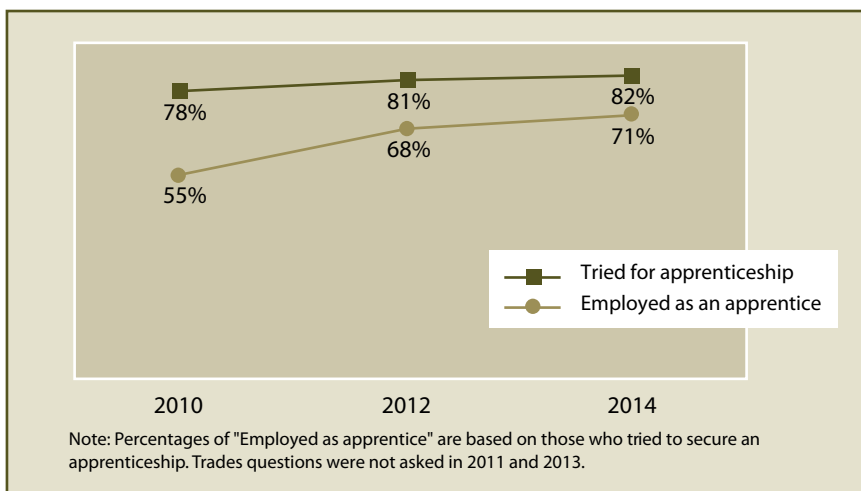


*Respondents from Other Trades programs were the most likely to say they were prepared for apprenticeship.*

### Assessment of training over time

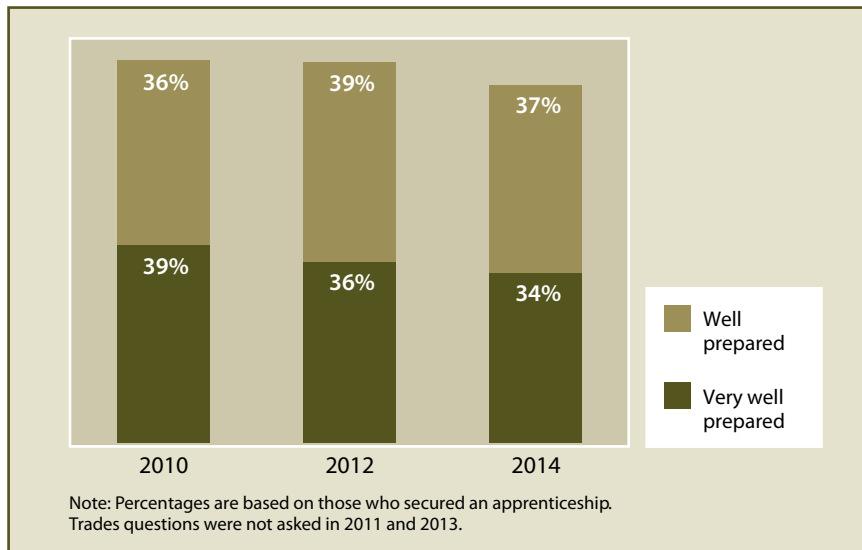
Overall, respondents' assessment of the length of foundation training has been stable over time, with virtually no changes in the percentages who said *too short* (18 percent), *too long* (10 percent), or *about right* (72 percent).

Since 2010, the percentages of those trying to secure an apprenticeship and those employed as an apprentice have both increased. In particular, there is a significant jump in the success rate of those who sought an apprenticeship employer. It is likely that the sharp increase between 2010 and 2012 in securing employment as an apprentice was due, in part, to the economic recovery underway, after the 2008/2009 recession.<sup>5</sup>



*Since 2010, the success rate for securing an apprenticeship has increased.*

The percentage of those who said their foundation programs prepared them for their apprenticeships dropped a little in 2014, compared to the two previous survey years.



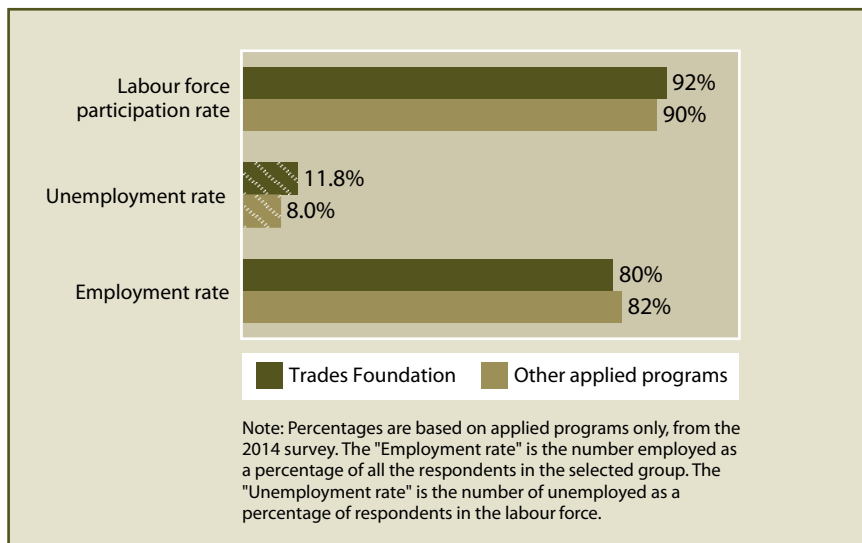
*The percentage of those who said they were prepared for their apprenticeship has changed slightly since 2010.*

## Employment outcomes of trades foundation students

### *Compared with other applied programs*

The labour force participation rate of the former trades foundation students was high; slightly higher than the participation rate of the 2014 survey respondents who had taken non-trades applied programs.<sup>6</sup>

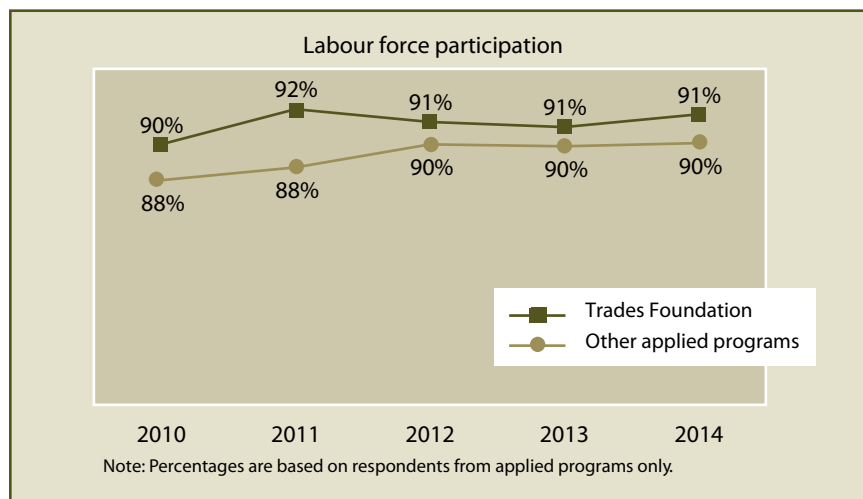
The unemployment rate<sup>7</sup> of the trades respondents was higher than that of the other former students from applied programs. It is important to note that this group included many who had **not** found employment as an apprentice after their training.<sup>8</sup> The employment rate reflected that as well, with a slightly higher rate for the non-trades programs.



*The unemployment rate for former foundation students was a little higher than that of other former applied-program students.*

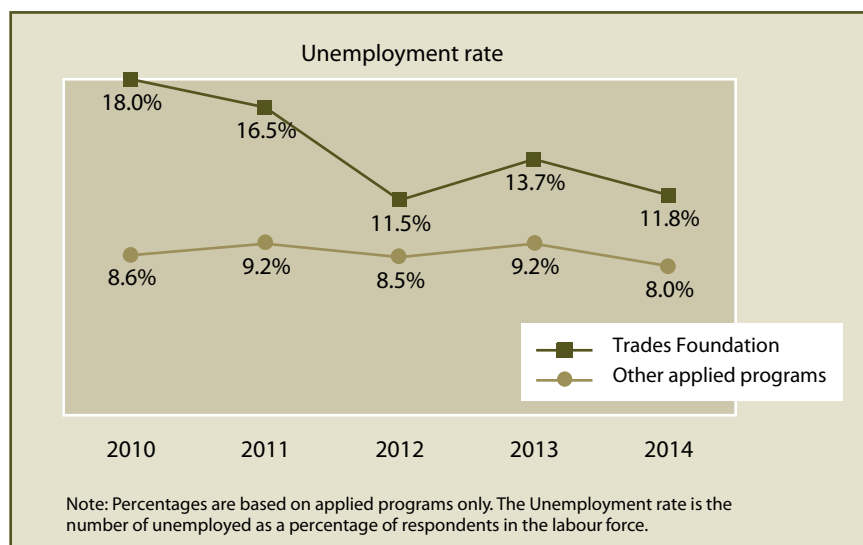


Over the last five survey years, the labour force participation rates have been consistent for the trades foundation respondents—they were also fairly close to the rates of former students from other applied programs.



*Labour force participation rates have been consistent over time.*

The unemployment rate, however, showed a lot of variation for the trades foundation respondents. The high rates of unemployment in 2010 and 2011 reflected the economic conditions following the 2008/2009 recession. The trades, in particular the construction trades, showed a significant decline in employment.<sup>9</sup>

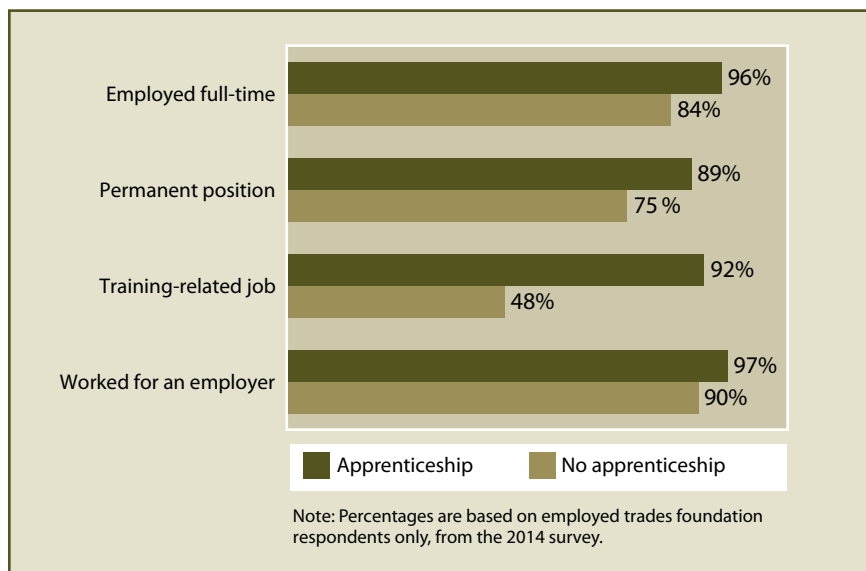


*Unemployment rates have improved since 2010.*

## Outcomes of those who secured an apprenticeship

The employment outcomes of the former trades foundation students differ according to their subsequent status as an apprentice. The 2014 respondents who found employment as apprentices following their training were not all still employed by the time of the survey, although their employment rate was high at 86 percent. The rate for those who did not secure apprenticeships was 73 percent.

Compared with those who did not secure an apprenticeship, the characteristics of employment for those who became apprentices tended to be more favourable. Most were employed full-time, and the majority were in a permanent position related to their training. Very few were self-employed—only 3 percent.



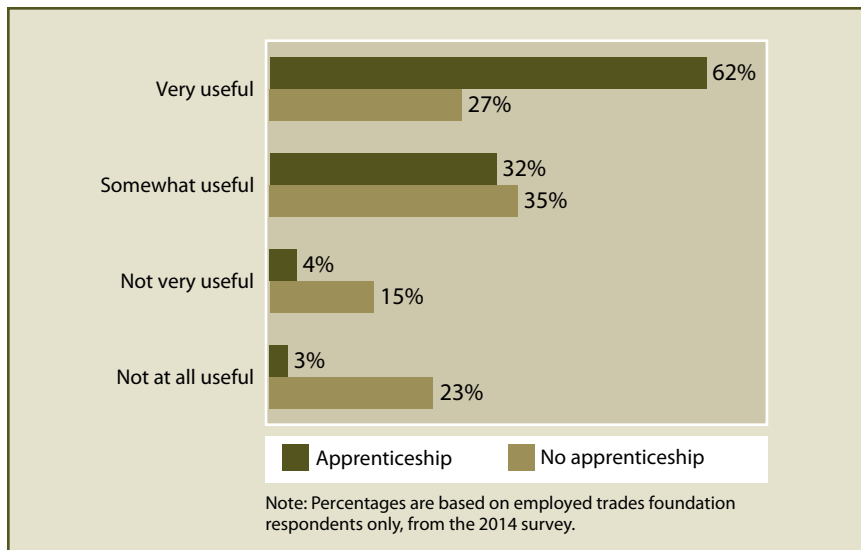
*The employment characteristics of those who secured apprenticeships were good.*

Not surprisingly, the respondents who did not find apprenticeships were not likely to report training-related employment. This difference has been consistent over time.



*Those who secured apprenticeships were very likely to report their job was related to their training.*

Compared with those who did not secure apprenticeships, those who did were much more likely to say that the knowledge and skills they gained in their foundation program were *very useful* in performing their job.



*Respondents who secured apprenticeships said the knowledge and skills they gained in their training were useful.*

There was also a significant difference in wage between those with apprenticeships and those who did not find an apprenticeship employer. At the time of the 2014 survey, the median wage for those with apprenticeships was \$18; for those who did not secure an apprenticeship it was \$15.

For apprentices, it is clear that wage has increased over time, while for those who did not secure an apprenticeship, there is no increase showing between the survey years 2010 and 2014.



*The hourly wage of those who secured apprenticeships was consistently higher, over time.*

## Conclusion

Trades foundation training is an important link to apprenticeship and provides key knowledge and skills for entry into a trade. The Diploma, Associate Degree, and Certificate Student Outcomes Survey collected information from former trades foundation students, one to two years after they completed their training.

Former foundation students were young, mostly male, and clustered in Automotive & Other Mechanics, Electrician, and Industrial & Heavy Duty Mechanics programs. Women were the majority participants in programs for Culinary Arts & Personal Services.

Of all the respondents who took foundation trades training, well over half found employment as apprentices. This percentage is similar to what was reported in the recent *ITA 2014/15–2016/17 Annual Service Plan Report*. It should be noted that of those who actively tried to secure an apprenticeship employer, almost three-quarters were successful.

From 2010 to 2014, there was a slight increase in the percentages of former foundation students who searched for an apprenticeship employer, and a significant increase in their success rates.

Some foundation students were more likely than others to find an apprenticeship: for example, those under 30 at the time of the survey were more likely to become apprentices than those who were 30 or older. Further, the former students who had taken Plumbing and Electrician programs were the most likely to search for and find apprenticeship employers.

Those who became apprentices after training were asked how well their program prepared them for their apprenticeship training—a majority said they were *very well* or *well prepared*. Compared with earlier years, there was a slight dip in the percentage of 2014 respondents who said they were prepared.

Not all of the former students who found employment as apprentices following their training were still employed by the time of the survey, although the employment rate for that group was high; it was significantly higher than the rate for those who did not become apprentices.

Employment characteristics of those who found apprenticeships were favourable: most were employed full-time, the majority were in a permanent position related to their training, and very few were self-employed. Compared with those who did not find an apprenticeship, they reported an hourly wage that was consistently higher over time.

*Foundation training is an important link to apprenticeship.*

*Former foundation students were young and the majority were male.*

*Over half of those who took foundation trades training found employment as apprentices.*

*There has been an increase in the success rate of those who searched for an apprenticeship employer.*

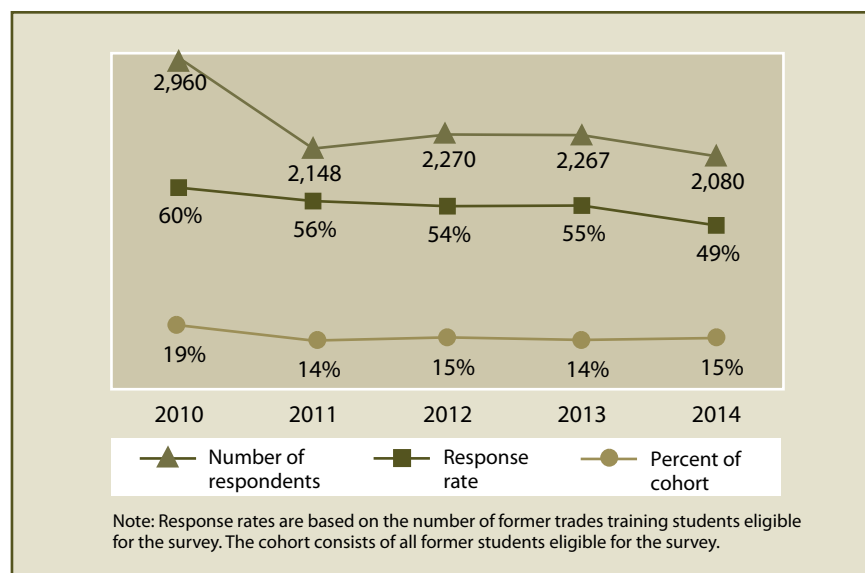
*A majority of those who secured apprenticeships said their foundation training prepared them.*

*Those who secured apprenticeship employers had favourable employment characteristics and higher wages.*

## Data for this paper

The data for this paper came from the 2014 Diploma, Associate Degree, and Certificate Student Outcomes (DACSO) Survey, with some additional data from the 2010 to 2013 surveys. The 2014 DACSO Survey collected information from students who had left their programs at B.C.'s colleges, institutes, and universities some 9 to 20 months before. The majority of the programs taken were “applied” programs, which were intended to lead directly to employment in a specific field. Respondents from the trades programs made up 19 percent of those who had taken applied programs. In 2014, there were 4,274 former trades foundation students eligible for the survey, and 2,080 completed it (a 49% response rate).<sup>10</sup>

Over five survey years, the response rates and number of respondents in the trades foundation group have dropped somewhat. Note that in 2010, the group was larger because the progressive credential system was still being introduced by ITA and only a few of these programs were surveyed in the Apprenticeship Student Outcomes (APPSO) Survey as progressive apprenticeships. In subsequent years, the number of former foundation programs surveyed in APPSO increased. Since 2011, the percentage of former trades foundation students eligible for the DACSO Survey has been consistent.



For purposes of the DACSO Survey, the trades foundation training programs are defined as programs that lead to apprenticeable trades as listed by the Industry Training Authority. The former students who took these programs are identified with a trades-training flag. Special trades-related questions directed at this group are asked every other year.

There are a few trades programs<sup>11</sup> that are not flagged as trades training; these are programs that are not intended to lead to an apprenticeship, such as power engineering, custodial worker, railway conductor, or airport operations. The trades foundation programs referenced in this paper include **only** those programs identified as trades training.

*Data were from the Diploma, Associate Degree, and Certificate Student Outcomes (DACSO) Survey.*

*Some foundation programs became progressive apprenticeships, reducing the number of trades respondents in DACSO.*

*Since 2011, the percentage of trades students in the DACSO cohort has been consistent.*

*The former trades foundation students are asked a special set of questions.*

*This paper includes only those programs identified as trades foundation training.*

For consistency and ease of presentation, most percentages in the text and charts have been rounded and totals may not always add to 100. Each percentage is based on the number of students who gave a valid response to the question—those who refused the question, or said *don't know*, were not included in the calculation.

## About BC Student Outcomes

The Diploma, Associate Degree, and Certificate Student Outcomes (DACSO) Survey is one of the BC Student Outcomes annual surveys that collect information from former post-secondary students. Those who respond are asked to evaluate their educational experiences and to talk about their employment and further education. For more information, see the [BC Student Outcomes](#) website.

The BC Student Outcomes surveys are conducted with funding from the Ministry of Advanced Education, the participating British Columbia post-secondary institutions, and the Industry Training Authority.

## Endnotes

- 1 Foundation programs are defined by the Industry Training Authority (ITA) as follows:  
A Foundation Industry Training Program is one that has been approved by the Industry Training Authority Board of Directors and is consistent with the Industry Training Authority policy “Criteria for Approving Foundation Industry Training Programs.” These programs are focused primarily on knowledge of essential skills needed to gain entry into a particular occupation, include minimal employment-based training, integrate with existing *Accredited* and *Recognized Industry Training Programs*, and successful completion results in the issuance of a *Certificate of Completion*. (Available on the Industry Training website: [Industry Training Authority Bylaw B1003](#).)
- 2 Former students from progressive programs are surveyed by the Apprenticeship Student Outcomes Survey because they are deemed to have completed a *final* level (or progression) of technical training required for certification, as opposed to having completed only a lower level of technical training for a traditional levelled apprenticeship program.
- 3 The trade foundation programs have been grouped into categories that correspond with the categories used for reporting the Apprenticeship Student Outcomes data. The groupings are based on the Classification of Instructional Programs (CIP) coding.
- 4 Available on the ITA website: <http://www.itabc.ca/corporate-reports/annual-reports>.
- 5 The impact of the recession is evident in other analyses of DACSO data. Refer to the information paper, [Occupational Skill Level: The Level of Skill Required for the Occupations of Graduates from Diploma, Certificate, and Associate Degree Programs](#), which includes employment and unemployment rates over time and a discussion of how 2010 affected the occupations of former students, with particular mention of those who took trades programs.
- 6 Applied programs are those that were intended to lead directly to employment; all trades training programs are applied. Other applied programs are those in Business and Management, Engineering and Applied Sciences, Health, Education, Human and Social Services, and Visual and Performing Arts.
- 7 The unemployment rate is the number of respondents unemployed as a percentage of respondents in the labour force.

- 8 Almost half (48 percent) of trades foundation respondents unemployed at the time of the survey had not found an apprenticeship employer.
- 9 Results from the APPSO Survey illustrate this decline as well. The highest unemployment rates recorded for the former apprentices surveyed were in 2010 and 2011. See the notes in the Employment section of the [\*2010 BC Apprenticeship Student Outcomes Survey Summary Report\*](#).
- 10 For the purposes of this paper, respondents from a high school program delivered through Camosun, Trades Skills Foundation (CORE), have been excluded. This program is different from the ACE IT programs, in that the students do not train at a post-secondary institution, and the respondents were still in high school at the time of the survey. Their outcomes are quite different from other trades foundation students.
- 11 As defined by the BC CIP Clusters, which are based on 2-digit Classification of Instructional Program (CIP) codes.